



Sustaining Protection for Nigeria's Largest Elephant Population in Yankari Game Reserve

FINAL REPORT

TO THE

INTERNATIONAL ELEPHANT FOUNDATION

FROM THE

WILDLIFE CONSERVATION SOCIETY (WCS)

MARCH 2012



Elephants in Yankari Game Reserve, Nigeria. (photo by Gilbert Nyanganji/WCS)

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Additional Contacts:

Graeme Patterson, PhD
Deputy Director
Africa Program
Wildlife Conservation Society
2300 Southern Boulevard
Bronx, NY 10460
T: 718-741-8201
F: 718-364-4275
E: gpatterson@wcs.org

Sylvia Alexander
Development Officer
Foundation Relations
Wildlife Conservation Society
2300 Southern Boulevard
Bronx, NY 10460
T: 718-741-1643
F: 718-364-7963
E: salexander@wcs.org

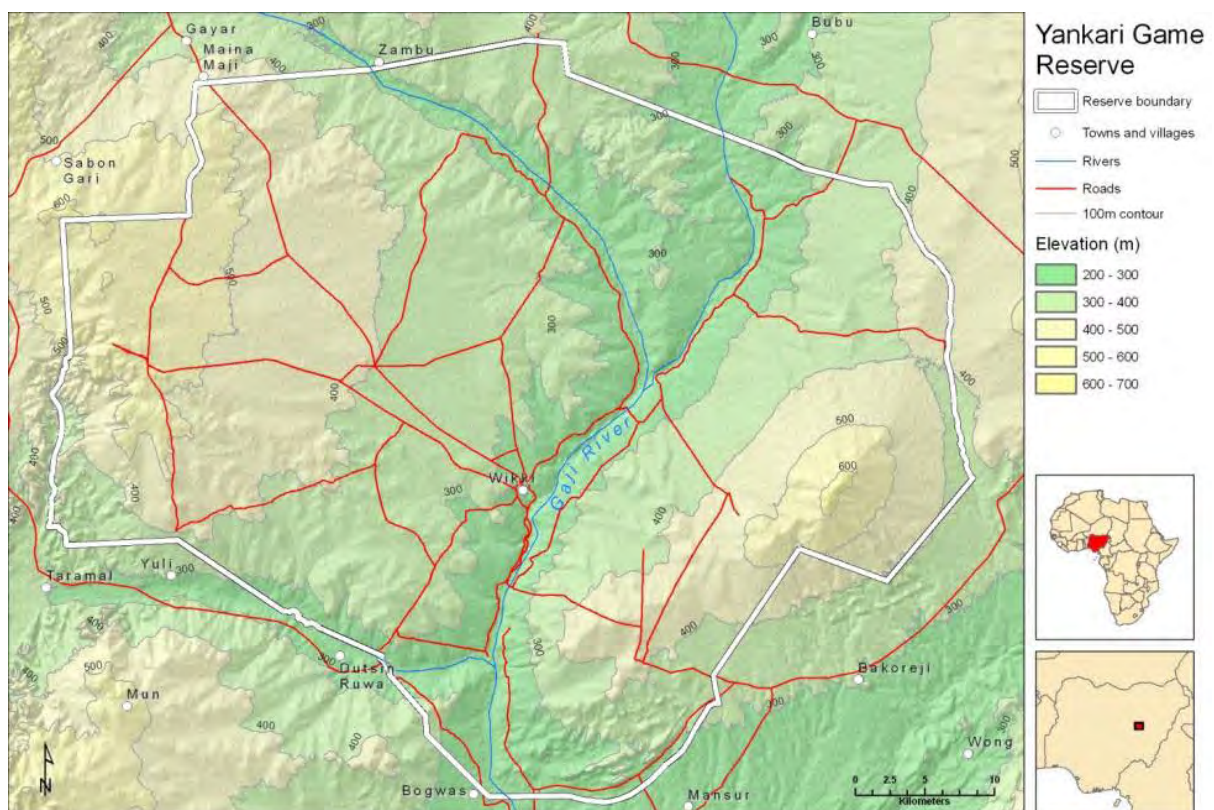
GOAL: *To improve the long-term conservation of elephants in Yankari Game Reserve by improving the capacity of the Bauchi State Government to reduce elephant poaching, and take appropriate management actions to protect the reserve and its wildlife.*

OBJECTIVES

1. Reduce levels of poaching in Yankari Game Reserve by providing support for regular and effective anti-poaching patrols.
2. Further strengthen the existing ranger-based CyberTracker monitoring system to facilitate sound management decisions for Yankari Game Reserve by Bauchi State Government.

INTRODUCTION

Yankari Game Reserve contains the largest surviving elephant population in Nigeria, and one of the largest remaining in West Africa. Estimated at about 350 individuals, this population is perhaps the only viable population remaining in Nigeria. Yankari also supports important populations of lion, buffalo, hippo, roan, and hartebeest. Managed as a national park from 1991 to 2006, Yankari is currently operated by the Bauchi State Government as a game reserve. Since 2006, management of the reserve outside the main tourist camp has been neglected and under-funded. As a result, levels of poaching increased substantially, and there was a resurgence of the illegal ivory trade.



Map 1: Location and topography of Yankari Game Reserve (map by Rich Bergl, North Carolina Zoo).

In 2010, the International Elephant Foundation awarded a grant of \$5,000 to the Wildlife Conservation Society (WCS) to improve levels of protection at Yankari and reduce rates of elephant poaching. A second grant of \$10,560 was awarded in 2011. Additional funds for

the project are also provided by the African Elephant Conservation Fund of the U.S. Fish and Wildlife Service, North Carolina Zoo, and WCS.

With technical support from Dr. Rich Bergl of the North Carolina Zoo, a CyberTracker-based monitoring system was established in July 2009. Together with the provision of equipment and payment of camping allowances for rangers on overnight patrol, this system has increased both the frequency and coverage of anti-poaching patrols, and a number of arrests have been made as a result. The CyberTracker system has allowed close monitoring of the frequency, duration, and extent of ranger patrols. As a result, it has been possible to clearly see when and where patrols are conducted. The CyberTracker system has documented an improvement in patrolling, but it has also highlighted a number of key areas within the reserve that have been neglected by rangers. Further, we must engage more with the rangers based at several posts on the edge of the reserve.

PROGRESS

Objective 1: Reduce levels of poaching in Yankari Game Reserve by providing support for regular, effective anti-poaching patrols.

Activity 1.1 Provision of field rations and payment of camping allowances for rangers on overnight patrol.

Since January 2011, we have provided field rations and paid camping allowances to rangers on overnight patrol, which has ensured that patrols of Yankari are gradually becoming more effective. Overnight camping patrols only started in 2009 – since then, patrols have covered larger areas of the reserve and have targeted known poaching hotspots. A total of 75 arrests were made during the period from 1st January 2011 to 1st January 2012, compared to 108 arrests made during the same period in 2010. These were for: hunting (19); livestock grazing (40); illegal entry (12); and trophy dealing (4). Although a decline in the number of arrests could indicate a decline in poaching as a result of improved protection efforts, it could also be due to reduced patrol effort. Throughout 2011, patrol efforts were constrained by a lack of functional patrol vehicles, meaning that more patrols were done on foot, and less distance was covered compared to 2010.



Map 2: Patrol Effort from January 2011 to January 2012.

Map 2 shows the level of patrol effort in the reserve for the period January 2011 to January 2012, demonstrating that almost all areas of the reserve received some level of protection in 2011, with a focus on the central Gaji River valley and the confluence of the Gaji-Yashi and Gaji-Yuli rivers. The one main area that was not effectively covered was Kariyo Hill in the far east of the reserve. During the reporting period, a total of 147 overnight foot-patrols were completed covering a distance of 10,604 km and lasting for 538 days.

Making patrols even more effective requires additional effort and resources: rangers still lack uniforms, boots, and rain gear. Few rangers have access to a firearm, and some are forced to carry a broken firearm with them on patrol. As a result, one un-armed ranger was shot by a poacher in 2011, although thankfully he was not badly injured and has since been able to return to work. Effective patrol work at Yankari requires a combination of vehicle and foot patrols. Unfortunately, the reserve currently lacks functional patrol vehicles which has a number of negative consequences for protection: without vehicular support, anti-poaching patrols cover smaller areas of the reserve, the absence of vehicle patrols inside the reserve encourages poachers to be more bold and active, response time to poaching signs is slower than it should be, and rangers waste valuable patrol time trekking on foot to/from priority patrol zones.

Activity 1.2 Develop and implement a patrol bonus system.

A reward system whereby rangers receive a cash bonus for each successful arrest has been shown to be a cost-effective means of improving the impact of protection programs at other protected areas in the region. Implementing this strategy in the Yankari Game Reserve has also helped to further reduce poaching levels, encouraging rangers to work harder and make extra effort in the field. The current incentive system at Yankari pays a bonus of N2,500 (\$15) for the arrest of someone grazing livestock inside the reserve, N5,000 (\$30) for the arrest of a hunter, N25,000 (\$150) for the arrest of an elephant poacher, and N25,000 (\$150) for the arrest of a lion poacher. The bonus system is popular with rangers and 75 arrests were made during the reporting period. Of these, seven people were arrested in relation to elephant poaching and dealing in ivory (see Appendix 1).

During the reporting period, an informant network was also developed to increase the effectiveness of anti-poaching patrols. The network is made up of six retired rangers and ex-hunters drawn from six of the surrounding communities. Intelligence reports received from this network led to the direct arrest of three elephant poachers and four people involved in the ivory trade in 2011. Establishing links with the State Security Service (SSS) and National Environmental Standards and Regulations Enforcement Agency (NESREA), has greatly assisted with the arrest of suspects outside the reserve, and has allowed our operations to be extended into neighbouring states. In 2011, NESREA facilitated a number of new national environmental regulations, including the “Protection of Endangered Species in International Trade.” Cases from Yankari will now be prosecuted at the Federal High Court in Bauchi using these new regulations, which result in much stiffer penalties than Bauchi State’s older outdated wildlife legislation.



A herd of elephants at one of the salt licks in Yankari Game Reserve (photo by Gilbert Nyanganji/WCS)

Objective 2: Further strengthen the existing ranger-based Cybertracker monitoring system to facilitate sound management decisions for Yankari Game Reserve

Activity 2.1 Conduct an annual refresher training workshop in CyberTracker use for senior rangers.

It was decided that a formal training workshop was not a major priority for now, and that more effective CyberTracker training and support could be provided to rangers on a daily basis by the WCS Project Manager, Gilbert Nyanganji. This regular support on CyberTracker use has ensured that the monitoring and data collection system continues to form a central part of the anti-poaching strategy for Yankari. Mr. Nyanganji took part in a CyberTracker review workshop facilitated by WCS in Calabar in April 2011.

Activity 2.2 Provide regular support to the wildlife officers and senior rangers in the use of Cybertracker, particularly with the downloading and analysis of data and the production of simple reports and maps for the General Manager after each patrol.

Yankari now has three wildlife officers employed by Bauchi State Government, although two of them are recent graduates lacking field experience. Mr. Nyanganji works with them to ensure that all CyberTrackers are downloaded after each patrol and that a report is provided to the General Manager. These simple patrol reports include a basic map, as well as data on elephant sightings and human activity. Data is analysed at regular intervals and basic reports are produced each month, in addition to a more comprehensive report each quarter. An annual Yankari report is also planned.

Activity 2.3 Review the effectiveness of the patrol effort to date and revise patrol strategy if necessary.

The current patrol strategy is constrained by a lack of patrol vehicles, difficult communication with ranger posts on the periphery of the reserve, and a lack of trained and experienced wildlife officers to supervise the rangers, as well as only limited funds to purchase field rations and pay camping allowances. During the dry season, from December to June, elephants and wildlife are concentrated along the Gaji River, therefore during this period we focus the majority of patrols within the Gaji River valley. The patrol strategy for the dry season is based out of the central Wikki Camp, from where typically three camping patrols are sent out each week, each lasting for five nights. Each foot patrol consists of a six-

man team of rangers who camp inside the reserve, moving camp at regular intervals during the patrol. At the same time, one vehicle-based mobile patrol team ranges throughout the reserve focusing on areas that may have been missed by foot patrols, and on tackling encroachment by livestock, a major problem during this period. Elephants and wildlife begin to migrate away from the river once the rains start. During the wet season, protection is decentralised and based at five sectors of the reserve. Within each sector, rangers based on the periphery of the reserve conduct one three-night camping patrol per week and two one-day patrols, all on foot. The central squad of rangers conducts a combination of one-day patrols and two-day patrols with two vehicles, one on either side of the Gaji River.

Elephants are also vulnerable to attacks by farmers when they venture outside the reserve. There are two peaks of crop damage in the year: when dry season crops of rice, maize, and vegetables mature during May-June; and when wet season crops of maize and guinea corn mature in September-October. Elephants are vulnerable to retaliatory attacks by farmers during this time and require additional protection by rangers.



Herd of elephants seen during the 2011 aerial census along one of the more open areas in the Gaji River valley (photo by Rich Bergl/North Carolina Zoo)

CONCLUSIONS AND RECOMMENDATIONS

- The project has been able to further strengthen levels of protection in Yankari Game Reserve. During the project period, from January 2011 to January 2012, there were 75 arrests made for hunting, trophy dealing, livestock grazing, and illegal entry. This compares to 108 arrests during the same 12-month period in 2010. A decline in the number of arrests could be attributed to a decline in poaching as our protection efforts improve, discouraging hunters from entering the reserve. Although a decline in the number of arrests could also mean reduced patrol efficiency by rangers, we are confident that with CyberTracker we are now able to monitor patrol effectiveness better than before. Ranger supervision and discipline remains a key issue for the reserve, however, and specialist training is planned for later in the year.
- Elephant poaching has not stopped but, with support from the International Elephant Foundation, it is gradually reducing. There were five confirmed cases of elephant poaching during the grant period, compared to nine during the same period in 2010. We believe this represents a decline in elephant poaching in Yankari which can be directly attributed to our efforts to improve protection, and support from the International Elephant Foundation. With continued support from the International Elephant Foundation, we are confident that we can further strengthen rates of protection and reduce cases of elephant poaching even further.
- More effective protection requires additional vehicles, as well as uniforms and field equipment for rangers. It is recommended that all broken vehicles be repaired immediately and that their maintenance be improved.
- All rangers require refresher training in anti-poaching techniques; levels of discipline in particular require improvement. We recommend that rangers be armed, at least with simple locally-made shotguns, be licensed to carry such firearms, and be trained in their use.
- All outstanding cases of ranger corruption uncovered in recent years require strong action to serve as a deterrent and warning to other rangers.
- Henceforth all cases should be tried at the Federal High Court in Bauchi and not at the Local Magistrates Court in Alkaleri, which did not always follow correct procedures and often resulted in very light fines or allowed poachers to go free.
- Increased political and financial support for Yankari is required from the Ministry of Tourism and Culture. Recent staff changes within the Ministry should be seen as an opportunity to strengthen support for conservation, and not just for tourism.

PLANS FOR THE FORTHCOMING PERIOD

Our planned activities at Yankari for 2012 include the following:

1. Continue existing CyberTracker-based patrols of the reserve, and engage more with rangers based on the periphery of the reserve.
2. Work with the specialist anti-poaching group *Conservation Outcomes* to further improve levels of protection, develop a training plan for Yankari rangers, and help review the current patrol strategies.
3. Improve levels of financial and political support for Yankari Game Reserve by Bauchi State Government, so that they share more of the burden of protecting the reserve with WCS.
4. Help provide uniforms, boots, rucksacks, and rain gear for all Yankari rangers.
5. Strengthen links with NESREA, the Nigerian Police Force, and the SSS to tackle the illegal ivory trade surrounding Yankari Game Reserve.
6. Provide training in CyberTracker use for junior rangers in collaboration with North Carolina Zoo.
7. Improve levels of publicity and awareness of Yankari, including the need to conserve endangered iconic animals such as the elephant and lion.
8. Develop strong links with local judiciary and the Federal High Court in Bauchi.
9. Investigate the use of 'chili pepper bazookas' to reduce levels of crop damage by elephants.
10. Work with local military forces and conduct joint patrols to help protect Yankari Game Reserve.

We are deeply grateful for the partnership of the International Elephant Foundation in this critically important elephant conservation initiative.

ATTACHMENTS

Final Financial Report
Appendix 1 (arrest details)

Andrew Dunn and Gilbert Nyanganji
February 2012

Appendix 1:

Details of the 75 arrests made in Yankari Game Reserve during the period 1 January 2011- 1 January 2012. All fines are shown in Nigerian naira=N (\$1 = N150).

	DATE	NAME	OFFENCE	COURT VERDICT
1	30/01/2011	Maharba	Hunting	Not known
2	31/01/2011	John Josept	Hunting	N17,000 or 11 month imprisonment
3	08/02/2011	Muhammed Adamu	Illegal entry	N5,000 or 3 month imprisonment
4	08/02/2011	Sale Adamu	Illegal entry	N5,000 or 3 month imprisonment
5	08/02/2011	Hasan Adamu	Illegal entry	N5,000 or 3 month imprisonment
6	01/03/2011	Buari Jalo	Grazing	Not known
7	10/03/2011	Muhamed A. Aliya	Grazing	N6,500 or 11 months
8	10/03/2011	Abu A. Aliya	Grazing	N6,500 or 11 months
9	10/03/2011	Adamu A. Iliya	Grazing	N10,000 or 15 months in jail
10	22/03/2011	Muhammed Lawan	Illegal entry	N4,000 plus 9 months in jail
11	01/04/2011	Weti Oro	Grazing	N11,000 or 12 months
12	15/04/2011	Usman A. Ori	Grazing	N11,000 or 12 months
13	25/04/2011	Alti Dan Mallam	Grazing	N10,000 or 11 months
14	06/05/2011	Bammi	Hunting	N6,000 or 4 months
15	06/05/2011	Ado Maazu	Grazing	N10,000 or 12 months
16	06/05/2011	Diro	Grazing	N10,000 or 12 months
17	06/05/2011	Umaru Dan Auta	Grazing	N8,000 or 13 months
18	06/05/2011	Adamu Dan Alh	Grazing	N8,000 or 13 months
19	06/05/2011	Ruwa Dan Auta	Grazing	N9,500 or 13 months
20	29/05/2011	Daiyabu Yakubu	Hunting	N9,500 or 13 months
21	01/06/2011	Alhaji Dan Auta	Grazing	N9,000 or 12 months
22	06/06/2011	Jarafu Murtala	Illegal Entry	N5,000 or 3 months
23	02/07/2011	Gwanna Bawa	Illegal Entry	N5,000 or 3 months
24	02/07/2011	Samuel Ema	Illegal Entry	N5,000 or 3 months
25	02/07/2011	Bala Muhammed	Illegal Entry	N5,000 or 3 months
26	04/07/2011	Umaru Garba	Hunting	Not known
27	04/07/2011	Rayyanu Yau	Hunting	Not known
28	07/07/2011	Usman Adamu	Hunting	Not known
29	07/07/2011	Inuwa sale	Hunting	Not known
30	07/07/2011	Abdullahi M. ya inna	Hunting	Not known
31	22/07/2011	Sani Abdullahi	Hunting	Case ongoing
32	24 /07/2011	Anaruwa Hamza	Grazing	N10,000 or 11 months
33	25 /07/2011	Micheal Yusuf	Hunting	N12,000 or 13 months
34	28/07/2011	Umaru Sanda	Hunting	Not known
35	28/07/2011	Ali Bappa Kufa	Hunting	Not known
36	06/08/2011	Sani Abdullahi	Hunting	Case ongoing
37	21/08/2011	Hussani Sulai	Illegal entry	N5,000 or 4 months
38	07/09/2011	Janyo A Janyo	Grazing	N9,500 or 9 months
39	07/09/2011	Kawu manu	Grazing	N9,000 or 8 months
40	07/09/2011	Manu Bello	Grazing	N9,500 or 9 months
41	07/09/2011	Juli Ali	Grazing	N10,000 or 9 months

42	10/09/2011	Buba Aninu	Grazing	N12,000 or 10 months
43	10/09/2011	Bala Giwa	Grazing	N18,500 or 13 months
44	10/09/2011	Jumba A. jairi	Grazing	N18,500 or 13 months
45	10/09/2011	Dare A. shadari	Grazing	N18,500 or 13 months
46	10/09/2011	Yalum A. Shadari	Grazing	N18,500 or 13 months
47	19/09/2011	Haruna slafawa	Grazing	N19,500 or 11 months
48	19/09/2011	Ali Buba	Grazing	N19,500 or 11 months
49	18/09/2011	Ishaku Muhammed	Hunting	Not known
50	18/09/2011	Abubakar Ayah	Illegal entry	N12,000 or 9 months
51	21/09/2011	Bashiru isa	Grazing	N20,000 or 14 months
52	21/09/2011	Isa Ardo baka	Grazing	N20,000 or 14 months
53	21/09/2011	Musa Kiri	Grazing	N20,000 or 14 months
54	26/09/2011	Jabbi A. Dare	Grazing	N14,000 or 11 months
55	26/09/2011	Yahaya A. Ardo	Grazing	N14,000 or 11 months
56	26/09/2011	Jibril A. Bello	Grazing	N14,000 or 11 months
57	26/09/2011	Mamman July	Grazing	N16,000 or 12 months
58	30/09/2011	Muhammadu Garba	Grazing	N16,000 or 12 months
59	30/09/2011	Musa Adamu	Grazing	N16,000 or 12 months
60	30/09/2011	Sule A. Alto	Grazing	N16,000 or 12 months
61	22/10/2011	Jummo Dabuba	Grazing	N16,000 or 12 months
62	22/10/2011	Mallam Aliya	Grazing	N15,000 or 10 months
63	31/10/2011	Abdullahi Bashiru	Illegal entry	N2,000 or 2 months
64	04/10/2011	Abdullahi Malami	Grazing	N14,000 or 10 months
65	12/10/2011	Oro Aninu	Grazing	N18,000 or 13 months
66	12/10/2011	Haruna Aminu	Grazing	N18,000 or 13 months
67	4/11/2011	Alhaji saadu	Trophy dealer	Case ongoing
68	8/11/2011	Adamu Alaramma	Trophy dealer	Case ongoing
69	8/11/2011	Blessin U Nwobodo	Trophy dealer	Case ongoing
70	06 /11/11	Musa Tunau	Hunting	N16,000 or 12 months
71	06/11/11	Muhammedu Auwalu	Hunting	N16,000 or 12 months
72	13/12/2011	Sani Abdullahi	Hunting	N16,000 or 12 months
73	3/12/2011	Sharju Gwangu	Hunting	N5,000 or 4 months
74	3/12/2011	Golpwana gombiji	Hunting	N5,000 or 4 months
75	17/12/2011	Abubakar sallah	Trophy dealer	Still in custody of Gombe police command